## § 35.200

- (b) Is an authorized user under §§ 35.290 or 35.390 or equivalent Agreement State requirements; or
- (c)(1) Has completed 60 hours of training and experience in basic radionuclide handling techniques applicable to the medical use of unsealed byproduct material for uptake, dilution, and excretion studies. The training and experience must include—
- (i) Classroom and laboratory training in the following areas—  $\,$
- (A) Radiation physics and instrumentation:
  - (B) Radiation protection;
- (C) Mathematics pertaining to the use and measurement of radioactivity;
- (D) Chemistry of byproduct material for medical use; and
- (E) Radiation biology; and
- (ii) Work experience, under the supervision of an authorized user who meets the requirements in §35.190, §35.290, or §35.390 or equivalent Agreement State requirements, involving—
- (A) Ordering, receiving, and unpacking radioactive materials safely and performing the related radiation surveys:
- (B) Calibrating instruments used to determine the activity of dosages and performing checks for proper operation of survey meters;
- (C) Calculating, measuring, and safely preparing patient or human research subject dosages;
- (D) Using administrative controls to prevent a medical event involving the use of unsealed byproduct material;
- (E) Using procedures to contain spilled byproduct material safely and using proper decontamination procedures; and
- (F) Administering dosages of radioactive drugs to patients or human research subjects; and
- (2) Has obtained written certification, signed by a preceptor authorized user who meets the requirements in §§35.190, 35.290, or 35.390 or equivalent Agreement State requirements, that the individual has satisfactorily completed the requirements in paragraph (c)(1) of this section and has achieved a level of competency sufficient to function independently as an authorized user for the medical uses authorized under §35.100.

## § 35.200 Use of unsealed byproduct material for imaging and localization studies for which a written directive is not required.

Except for quantities that require a written directive under §35.40(b), a licensee may use any unsealed byproduct material prepared for medical use for imaging and localization studies that is—

- (a) Obtained from a manufacturer or preparer licensed under §32.72 of this chapter or equivalent Agreement State requirements; or
- (b) Prepared by an authorized nuclear pharmacist, a physician who is an authorized user and who meets the requirements specified in §§35.290 or 35.390, or an individual under the supervision of either as specified in §35.27;
- (c) Obtained from and prepared by an NRC or Agreement State licensee for use in research in accordance with a Radioactive Drug Research Committee-approved protocol or an Investigational New Drug (IND) protocol accepted by FDA; or
- (d) Prepared by the licensee for use in research in accordance with a Radio-active Drug Research Committee-approved application or an Investigational New Drug (IND) protocol accepted by FDA.

## § 35.204 Permissible molybdenum-99 concentration.

- (a) A licensee may not administer to humans a radiopharmaceutical that contains more than 0.15 kilobecquerel of molybdenum-99 per megabecquerel of technetium-99m (0.15 microcurie of molybdenum-99 per millicurie of technetium-99m).
- (b) A licensee that uses molybdenum-99/technetium-99m generators for preparing a technetium-99m radiopharmaceutical shall measure the molybdenum-99 concentration of the first eluate after receipt of a generator to demonstrate compliance with paragraph (a) of this section.
- (c) If a licensee is required to measure the molybdenum-99 concentration, the licensee shall retain a record of each measurement in accordance with §35.2204.